

NOTICE

Environment, Safety, and Health Information

February 24, 2000

Notice No. 0045

Implementation of Amended 10 CFR 835 Rule, Occupational Radiation Protection

Introduction

On November 4, 1998, the Department of Energy (DOE) published an amendment to the occupational radiation protection rule, 10 CFR 835. On December 29, 1999, DOE approved the LANL implementation plan for the amendment to the rule. LANL has 150 days (May 26, 2000) from the DOE approval date to fully implement the new requirements and definitions in the amended rule. The purpose of this NOTICE is to update the current radiation protection requirements and definitions found in LANL occupational radiation protection LPRs and LIRs (LPR/LIR 402-7xx series) with the new requirements and definitions found in the amendment.

This NOTICE applies to all Laboratory workers including contractors, subcontractors, and visitors, including onsite members of the public, who are engaged in radiological activities, enter radiological controlled areas or radiological areas, or who otherwise support the LANL radiation protection program.

Definitions

General Terms ([Click here](#))

Dose Terms ([Click here](#))

Summary of Changes

- Exclusion of applicability of 10 CFR 835 to activities conducted under the Nuclear Explosives and Weapons Surety Program relating to the prevention of accidental or unauthorized nuclear detonations.
- Exclusion of applicability of 10 CFR 835 to radioactive material transport conducted under the auspices of DOT or DOE Orders.
- Exclusion of applicability of 10 CFR 835 to radiological activities conducted on foreign soil.
- Requirement to include occupational dose received as a result of the above excluded activities.
- Allowance to extend the frequency of certain activities by a period of 30 days to accommodate scheduling needs.
- Elimination of specific requirements for RCT training in subpart J of the rule and the addition of a requirement in 835.103 for individuals responsible for ensuring compliance with the rule having the appropriate education, training, and skills necessary to discharge these duties.
- Establishment of a general requirement for written procedures to be developed and implemented consistent with the extent of the radiological hazards, complexity of the measures needed to achieve compliance, and the education, training, and skills necessary to implement the measures.
- Requirement to include all occupational doses received during the current year except for doses resulting from planned special exposures and authorized emergency exposures.
- Additional dose limits and other requirements for planned special exposures.
- Inclusion of deterministic dose limits and monitoring thresholds for these limits for minors.

- Air sampling requirements to be based on potential individual exposures in terms of derived air concentration hours (DAC-hours) in a year rather than a percentage of the annual limit on intake (ALI). Also to include air sampling when respiratory equipment is being used.
- Establishment of requirements for the survey of radioactive material packages received from transportation.
- Establishment of a requirement for written authorizations for entry into radiological areas.
- Area monitoring requirements for each entry into high radiation areas.
- Change in requirement for very high radiation area access control to only prevent the unauthorized or inadvertent access into these areas.
- Revision of contamination area and high contamination area to be based on removable contamination levels only.
- Establishment of a radioactive materials area.
- Posting exceptions for radioactive materials areas.
- Labeling exceptions for radioactive materials.
- Radioactive material label color exception.
- New requirements related to external and internal dose records, radiation protection instrument and equipment calibration and maintenance records, and sealed radioactive source records.
- Radiation protection training requirements for escorts.
- Simplification of radiation protection training requirements in subpart J.
- Codification of sealed radioactive source control requirements previously established in DOE N5400.5.
- New requirements related to emergency exposure situations.
- Minor revisions to footnotes of Appendix C and D of the rule.

[Click here](#) for each new or revised requirement and required actions that are needed to implement each requirement.

Implementation Schedule

- By close of business (COB) on March 27, 2000, modify internal documentation to ensure consistency with the applicable requirements and definitions of this NOTICE.
- By COB May 26, 2000, fully implement the requirements and definitions of this NOTICE.
- By COB June 25, 2000, perform a self-assessment of implementation of this NOTICE as described below.

Roles and Responsibilities

The safety- and environmentally responsible line-management chain and workers engaged in radiological activities shall

- modify internal documentation to ensure consistency with the requirements and definitions of this NOTICE no later than March 27, 2000.
- fully implement the requirements and definitions of this NOTICE no later than May 26, 2000.
- perform a self-assessment of implementation of the applicable requirements of this NOTICE and report findings of noncompliance to the ESH-12 Policy Integration Team (mail to: weisele@lanl.gov, MS K483) no later than June 25, 2000.

Radiation Protection Organization (ESH-1, ESH-4, ESH-12, and ESH-13) shall

- provide support to the Laboratory and safety-responsible line managers and workers in

implementing the requirements and definitions of this NOTICE.

- modify internal documentation to ensure consistency with the requirements and definitions of this NOTICE no later than March 27, 2000.
- implement applicable requirements of this NOTICE no later than May 26, 2000.
- perform a self-assessment of implementation of the applicable requirements of this NOTICE and report findings of noncompliance to the ESH-12 Policy Integration Team (mail to: weisele@lanl.gov, MS K483) no later than June 25, 2000.

BUS-4 Packaging and Transportation Team shall

- incorporate the radioactive materials receipt requirements of 835.405 into team-specific documentation no later than March 27, 2000.
- implement these requirements no later than May 26, 2000 for radioactive materials packages received at the SM-30 warehouse.
- perform a self-assessment of implementation of the requirements of this NOTICE and report findings of noncompliance to the ESH-12 Policy Integration Team (mail to: weisele@lanl.gov, MS K483) no later than June 25, 2000.

AA-2 and the ESH-12 Policy Integration Team shall provide self-assessment assistance to the safety- and environmentally responsible line-management chain, the radiation protection organization, and the BUS-4 Packaging and Transportation Team for this NOTICE.

Questions?

Contact Bill Eisele, ESH-12, 667-7832, (mail to: weisele@lanl.gov, MS K483)

APPENDIX E TO PART 835--VALUES FOR ESTABLISHING SEALED RADIOACTIVE SOURCE ACCOUNTABILITY AND RADIOACTIVE MATERIAL POSTING AND LABELING REQUIREMENTS

The data presented in Appendix E are to be used for establishing the need for radioactive material area posting in accordance with 835.603(g) and establishing the need for radioactive material labeling in accordance with 835.605. Continue to refer to Appendix C for determining whether sealed radioactive sources are accountable until LIR 402-716-01, Source Control, is revised as stated in NOTICE 0018. Appendix E is only to be used for radioactive material posting and labeling until LIR 402-716-01, Source Control, is revised and published. At that time, this Appendix shall also be used to determine source accountability. ([Click here for table.](#))

Note: The data are listed in alphabetical order by nuclide.
